

ORDER

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

6930.26

8/21/81

SUBJ: MODIFY ANTENNA SUPPORT ARMS ON COMMUNICATIONS ANTENNA TOWERS

1. PURPOSE. This order directs that antenna support brackets on communications antenna towers be inspected and modified (if required) at those locations where certain TACO and other large antennas are, or are to be, installed. The modification will strengthen the brackets that were designed to support smaller antennas. The modifications shall be in accordance with the following drawings:

<u>Drawing No.</u>	<u>Date</u>	<u>Title</u>
D-6200-1	8/13/81	Antenna Support Bracket GP Towers Modification for TACO Antennas Fabrication and Installation Details
D-6200-2	8/13/81	Antenna Support Bracket Andrews Towers Modification for TACO Antennas Fabrication and Installation Details.

2. DISTRIBUTION. This order is distributed to branch level in the Airway Facilities Service in Washington headquarters; to director level at the FAA Technical Center and the Aeronautical Center; to branch level in regional Airway Facilities divisions; and to all Airway Facilities sector offices.

3. BACKGROUND. The antenna support brackets on most communications antenna support towers used at remote transmitter (RT), remote communication air/ground (RCAG), and Flight Service Stations (FSS), etc., were fabricated similar to or in accordance with drawings D-5058 and D-5059 and designed to support the antennas shown on D-5059. Some larger antennas now being purchased (TACO models D-2261A, D-2272, D-2273, D-2274) consist of 2.25 in diameter vertical elements from 7 to 13 feet long and will overstress the support brackets in high winds. The wind load creates a bending force at the base of the antenna which has caused the horizontal bracket arm to fail in torsion at some sites. In order to prevent these failures, modifications have been designed to strengthen the arm shown on D-5059 and the arm of the supports furnished under the current national supply contract (DOT-FA79AC-9071).

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4. ACTION. The location of all existing TACO antenna models D-2261A-1, D-2272, D-2273, and D-2274 shall be determined and the antenna support arms shall be modified or replaced in accordance with the details shown on the drawings. Antenna support arms which differ from the standard details shown shall be analyzed for local wind loads on the antenna used and modified as required.

5. FUNDING. Cost of material and installation will be nominal; therefore, it is expected that this modification will be accomplished with available local resources.



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